



ATTORNEY'S DOCKET NO: L0559/7001(ERP)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Walter Newman et al.,  
Serial No: 09/507,146  
Filed: February 18, 2000  
For: BIOTINYLATED-CHEMOKINE ANTIBODY COMPLEXES  
Examiner: Canella, K.  
Art Unit: 1642

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Commissioner for Patents, Washington, D.C. 20231, on the 29th day of January, 2001.

*E. R. Plumer*  
Elizabeth R. Plumer, Reg. No. 36,637

Commissioner for Patents  
Washington, D.C. 20231

**SECOND PRELIMINARY AMENDMENT**

Sir:

**IN THE CLAIMS:**

A substitute set of claims is attached hereto. Please substitute the substitute set of claims (pages 50-52) for the claims presently of record (original pages 50-54).

The following is a marked up copy of the claim amendments to facilitate the Examiner's review.

Please cancel claims 31-33, 35, and 37-40 as being drawn to a non-elected invention.

Please add the following new claims 41-58:

- B1*
41. (NEW) The composition of claim 1, wherein the composition is lyophilized.
42. (NEW) The composition of claim 1, further comprising a pharmaceutically acceptable carrier.
- Sub C6*
43. (NEW) The composition of claim 42, wherein the pharmaceutically acceptable carrier is acceptable for a mode of delivery selected from the group consisting of: intradermal delivery, intramuscular delivery, intraperitoneal delivery, intravenous delivery, subcutaneous delivery, and controlled release delivery.

44. (NEW) The composition of claim 1, wherein the biotin is selected from the group consisting of L-biotin, D-biotin and derivative thereof.

B1  
conclude

45. (NEW) The composition of claim 7, wherein the chemokine is selected from the group consisting of the chemokines of Table 1.

46. (NEW) The composition of claim 7, wherein the chemokine has a carboxyl terminus and the biotin is covalent attached to the carboxyl terminus of the chemokine.

47. (NEW) The composition of claim 1, wherein the biotin is covalently coupled to the pharmacologically active agent via a linker molecule.

48. (NEW) The composition of claim 1, wherein the complex has a half-life ranging from about 15 minutes to about 1 hour in the presence of supra physiological levels of biotin.

49. (NEW) The composition of claim 1, wherein the anti-biotin antibody has an affinity constant ranging from about 1.0 to about 100.0 nanomolar.

50. (NEW) The composition of claim 1, wherein the anti-biotin antibody is selected from the group consisting of an intact antibody, and an antibody fragment.

Sub  
C6  
cont

51. (NEW) The composition of claim 1, wherein the anti-biotin antibody is a human antibody or fragment thereof.

52. (NEW) The composition of claim 1, wherein the anti-biotin antibody has a subclass selected from the group consisting of a IgG1 subclass, and an IgG3 subclass.

53. (NEW) The composition of claim 1, wherein the anti-biotin antibody comprises a therapeutic agent attached thereto.

54. (NEW) The composition of claim 1, wherein the complex has a half-life of from one day to one month in vivo.

55. (NEW) The composition of claim 1, wherein the complex has a half-life of from one week to two weeks in vivo.

56. (NEW) The composition of claim 27, wherein the therapeutically effective amount of biotin is from about 100 µg to about 100 mg.

57. (NEW) The composition of claim 27, wherein the therapeutically effective amount of biotin is from about 100 µg to about 10 mg.

58. (NEW) The composition of claim 27, wherein the therapeutically effective amount of biotin is from about 1 mg to about 10 mg. <sup>†</sup>